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U. S. DEPARTMENT OF AGRICULTURE.

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LIST OF PUBLICATIONS

OF THE

U. S. DEPARTMENT OF AGRICULTURE

FOR THE

FIVE YEARS 1889-1893, INCLUSIVE.

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PUBLISHED BY AUTHORITY OF THE SECRETARY OF AGRICULTURE.

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WASHINGTON:  
GOVERNMENT PRINTING OFFICE.  
1894.



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LETTER OF TRANSMITTAL.

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U. S. DEPARTMENT OF AGRICULTURE,  
DIVISION OF RECORDS AND EDITING,

*Washington, D. C., March 23, 1894.*

SIR: I have the honor to transmit herewith for publication a list of the publications of this Department for the last five calendar years. The list is a combination of those for 1890, 1891, and 1892, which have appeared in the annual reports of the chief of this division for those years, and of lists for 1889 and 1893, which have not heretofore been printed.

It is hoped that in course of time a similar list may be prepared of all the publications issued by the Department from 1862, the year of its establishment, to date. At present the data for such a list are not fully available, and further research will be needed to make a list which may be regarded as complete.

I have prefixed to the present list a brief introductory, giving some information of interest regarding the publication work of the Department.

Very respectfully,

GEO. WM. HILL,

*Chief of the Division of Records and Editing.*

Hon. J. STERLING MORTON,

*Secretary.*

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PUBLICATIONS OF THE U. S. DEPARTMENT OF AGRICULTURE, 1889-1893, INCLUSIVE.

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**INTRODUCTORY.**

Publications of the Department of Agriculture may be prepared and printed by special direction of the Congress, or may originate in the Department as the information at hand may justify or the public necessity may seem to demand. If ordered by Congress, their cost is borne by that body; if not, they are paid for from the printing fund annually appropriated to the Public Printer for the use of the Department, or from funds set aside by law for the particular division whence the publication comes, the act of appropriation sometimes containing a clause allowing part of the money to be used for printing.

Of publications produced in pursuance of act of Congress, may be instanced the Annual Report of the Department, the annual reports of the Bureau of Animal Industry and of the Weather Bureau, the reports of the U. S. Entomological Commission, and reports upon special lines of investigation, such as irrigation, rainfall production, etc. Sometimes Congress has printed for its own distribution large editions of publications which were not originally ordered by that body, as in the cases of the books known as "Diseases of the Horse," "Diseases of Cattle," and "Sheep Industry of the United States."

For many years the Annual Report of the Department contained, besides the records of work in the Department, which was for a long time comparatively meager, articles by specialists on various subjects connected with agriculture. In course of time this mass of miscellaneous matter made the volumes unwieldy in bulk, and it has been eliminated from the Reports of recent years. It now consists of the annual report of the Secretary of Agriculture to the President and the annual reports of the Assistant Secretary and the chiefs of the various bureaus and divisions to the Secretary. The size of the edition—500,000 copies for 1892—demands that the Report be popular. Therefore executive matters are largely omitted from it. Each Report is intended to present a full account of the valuable work of the Department for the year covered by it. The effort to restrict this Report within reasonable limits has been

on the whole successful. The Annual Report, which in 1888 included reports of twelve divisions and two miscellaneous reports, covered 708 pages; in 1889 there were reports of fifteen divisions, in 560 pages; in 1890, twenty divisions, in 612 pages; in 1891, twenty divisions, in 653 pages, over 100 pages of which were occupied by the Weather Bureau, that being the first year of its connection with the Department of Agriculture; in 1892, twenty-one reports, in 656 pages.

Of the publications arising in the Department the only general class of bulletins to which any one or more of the divisions contribute numbers or parts of numbers is that known as "Farmers' Bulletins," which are numbered in one consecutive series. As the name shows, these bulletins are intended to be entirely popular and brief treatises on agricultural topics of general and immediate interest to the people. The subjects are treated in a plain, practical way, and the number of an edition varies from 5,000 to over 100,000, being largely dependent upon the relative importance of the matter discussed and the extent of the section to which the several bulletins are specially applicable.

Each division offers for publication from time to time bulletins on subjects which have been its special study, and some divisions issue circulars of information regarding their work or circulars of inquiry intended to facilitate their labors. The usual edition of a bulletin is from 5,000 to 10,000 copies, frequently less than the former figure but rarely more than the latter, governed largely by the class of readers it is intended to reach.

Of the periodical publications, the Division of Statistics issues in editions of 18,000 monthly crop reports, numbered and paged consecutively, and sends out in advance of each, in editions of about 127,000, a four-page synopsis of its principal features. The other periodical publications are: "Contributions from the U. S. National Herbarium," average edition 2,500, Division of Botany; "Insect Life," average edition 5,500, Division of Entomology; "Experiment Station Record," average edition 8,000, Office of Experiment Stations; "Journal of Mycology," average edition 2,500, Division of Vegetable Pathology; and the semi-daily weather map, the daily weather bulletin, the weather crop bulletin, and the "Monthly Weather Review," in the Weather Bureau. "North American Fauna," prepared in the Division of Ornithology and Mammalogy, has been published in several parts, but as each issue has had separate title and paging it can not properly be classed as a periodical.

Some idea of the extent of the publications of the Department may be obtained from the following table, which also shows the amount of the printing fund appropriated for the use of the Department for the five years 1889-1893. The list is exclusive of circulars of inquiry, Congressional publications, and those of the Weather Bureau.

Years.	Number of publications.	Number of printed pages.	Number of copies issued.	Amount of printing fund.
1889.....	78	4,291	526,537	\$40,914.37
1890.....	89	5,006	1,363,300	39,235.45
1891.....	109	6,715	1,883,400	50,000.00
1892.....	131	10,109	2,116,300	65,000.00
1893.....	118	7,939	2,149,350	75,000.00
Total .....	525	34,060	8,038,887	270,149.82

As the list of publications is for calendar years and the appropriations are for fiscal years, some publications covered by the first and last appropriations mentioned do not appear. A comparison of the years 1889 and 1892 makes the singularly gratifying showing that, with an increase in printing fund of 58 per cent, the number of publications has increased more than 67 per cent, the number of pages more than 135 per cent, while the number of copies issued has advanced over 300 per cent. That is, for less than twice as much money, there have been issued more than twice the number of publications, nearly three times the number of pages, and over four times the number of copies, thus making it possible to reach a very much larger number of people. These figures show the result of a settled policy adopted and maintained during the past few years, looking to a more systematic classification of the publications of the Department so as to meet the wants of different classes of readers, and to a wider extension of publications of a popular character.

The distribution of the publications is free, copies being franked to applicants as long as there are any on hand not needed for the files of the Department. In only two instances has Congress provided for the sale of these documents. Long before the Weather Bureau became one of the divisions of the Department the law provided that the Chief Signal Officer might sell surplus copies of maps or publications.\* Under this law the Weather Bureau still disposes of its publications by sale. In the act of Congress making appropriations for the Department of Agriculture for the fiscal year ending June 30, 1894, there is a clause allowing the Secretary of Agriculture to sell copies of the card index to agricultural literature,† prepared by the Office of Experiment Stations.

\* "The Chief Signal Officer may cause to be sold any surplus maps or publications of the Signal Office, the money received therefor to be applied toward defraying the expenses of the Signal Service; and an account of the same shall be rendered in each annual report of the Chief of the Signal Service." [U. S. Revised Statutes, second ed. 1878, p. 37, sec. 227.]

† " \* \* \* and the Secretary of Agriculture is hereby authorized to furnish to such institutions or individuals as may care to buy it copies of the card index of agricultural literature prepared by the Office of Experiment Stations, and charge for the same a price covering the additional expense involved in the preparation of these copies, and he is hereby authorized to apply the moneys received toward the expense of the preparation of the index." [U. S. Statutes at Large, vol. 27, p. 741.]

In the list which follows, the arrangement of publications by divisions and the practice of repeating in each instance the ordinary characterization of a bulletin, as, for instance, "Ornithological Bulletin No. 4," "Chemical Bulletin No. 20," etc., both of which points were features of former lists, have been retained as interposing fewest obstacles to ready reference, and to the unmistakable identification of a document. Unless otherwise stated, the size of each publication is octavo.

## LIST OF PUBLICATIONS OF THE U. S. DEPARTMENT OF AGRICULTURE FOR THE FIVE YEARS 1889-1893, INCLUSIVE.

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### OFFICE OF THE SECRETARY.

Report of the Commissioner of Agriculture for 1888. (Norman J. Colman, Commissioner.) Pp. 708, illustrated. June, 1889.

Report of the Secretary of Agriculture for 1889. (J. M. Rusk, Secretary.) Pp. 560, illustrated. June, 1890.

Report of the Secretary of Agriculture for 1890. (J. M. Rusk, Secretary.) Pp. 612, illustrated. April, 1891.

Report of the Secretary of Agriculture for 1891. (J. M. Rusk, Secretary.) Pp. 653, illustrated. May, 1892.

Report of the Secretary of Agriculture for 1892. (J. M. Rusk, Secretary.) Pp. 656, illustrated. August, 1893.

Report of the Secretary of Agriculture for 1889. By J. M. Rusk. (Preliminary report to the President.) Pp. 40. November, 1889.

Report of the Secretary of Agriculture for 1890. By J. M. Rusk. (Preliminary report to the President.) Pp. 52. November, 1890.

Report of the Secretary of Agriculture for 1891. By J. M. Rusk. (Preliminary report to the President.) Pp. 59. November, 1891.

Report of the Secretary of Agriculture for 1892. By J. M. Rusk. (Preliminary report to the President.) Pp. 64. November, 1892.

Report of the Secretary of Agriculture for 1893. By J. Sterling Morton. (Preliminary report to the President.) Pp. 48. November, 1893.

Special Report of the Assistant Secretary—The Scientific Work of the Department in its Relations to Practical Agriculture. By Edwin Willits. (From the Report of the Secretary of Agriculture for 1890.) Pp. 59-76. April, 1891.

Special Report of the Assistant Secretary—Coöperation of the Department of Agriculture with the Educational Forces in the United States relating to Agriculture. By Edwin Willits. (From the Report of the Secretary of Agriculture for 1891.) Pp. 65-81. June, 1892.

Special Report of the Assistant Secretary of Agriculture for 1892—Duties of the Assistant Secretary; Review of the Work, 1889-1892. By Edwin Willits. (From the Report of the Secretary of Agriculture for 1892.) Pp. 67-84. June, 1893.

Farmers' Bulletin No. 6. Tobacco: Instructions for its Cultivation and Curing. By John M. Estes. Pp. 8. February, 1892.

Farmers' Bulletin No. 7. Spraying Fruits for Insect Pests and Fungous Diseases, with a Special Consideration of the Subject in its Relation to the Public Health. Pp. 20. April, 1892.

Report on the Use of Maize (Indian Corn) in Europe, and on the Possibilities of its Extension. (Contents: The Introduction of Maize into Europe, by Charles J. Murphy; The Food Value of Maize, by H. W. Wiley; The Indian Corn Industry in the United States, by B. W. Snow.) Pp. 36. December, 1891.

German edition. Pp. 23. May, 1892.

French edition. Pp. 22. June, 1892.

Spanish edition. Pp. 24. October, 1892.

Scandinavian edition. Pp. 22. February, 1893.

Letter from the Secretary of Agriculture, transmitting the Report of the Bureau of Animal Industry for the year 1890. (Senate Executive Document No. 8, Fifty-first Congress, second session.) Pp. 104. December, 1890.

Letter from the Secretary of Agriculture, transmitting the Report of the Bureau of Animal Industry for the year 1891. (Senate Executive Document No. 11, Fifty-second Congress, first session.) Pp. 129. January, 1892.

Letter from the Secretary of Agriculture, transmitting the Report of the Bureau of Animal Industry for the year 1892. (Senate Executive Document No. 20, Fifty-second Congress, second session.) Pp. 229. January, 1893.

Progress Report on the Dairy Industry of Denmark. By Prof. C. C. Georgeson. Pp. 14. March, 1893.

Selected Correspondence relating to the Export Trade of the United States in Live Stock and Meat Products. Pp. 33. March, 1893.

Studies of Parasitic and Predaceous Insects in New Zealand, Australia, and adjacent Islands. Made by A. Koebele, at the request of the California State Board of Horticulture. Pp. 39. June, 1893.

Special Report on Tea-Raising in South Carolina. By Charles U. Shepard. (From the Report of the Secretary of Agriculture for 1892.) Pp. 627-640, pls. 3. July, 1893.

Indian Corn (or Maize) in the Manufacture of Beer. By Dr. Robert Wahl. Pp. 21. September, 1893.

German edition. Pp. 22. September, 1893.

Letter from the Secretary of Agriculture, transmitting reports upon the operations of the Women's Silk Culture Association of the United States, and of the Ladies' Silk Culture Society of California, and upon experiments made in the District of Columbia with silk-reeling machinery. (House Executive Document No. 110, Fifty-first Congress, first session.) Pp. 30. January, 1890.

Communication from the Acting Secretary of Agriculture, in reference to a deficiency in the appropriation for the North Dakota agricultural experiment station, and stating that said appropriation should be made. (House Executive Document No. 423, Fifty-first Congress, first session.) Pp. 1. June, 1890.

Letter from the Secretary of Agriculture, transmitting a statement of expenditures for the Department of Agriculture for the fiscal year ended June 30, 1889. (House Executive Document No. 104, Fifty-first Congress, first session.) Pp. 98. January, 1890.

Letter from the Secretary of Agriculture, transmitting a statement of the expenditures of all appropriations in the Department of Agriculture for the fiscal year ended June 30, 1890. (House Executive Document No. 35, Fifty-first Congress, second session.) Pp. 95. December, 1890.

Letter from the Secretary of Agriculture, transmitting a detailed statement of all expenditures of appropriations for the Department of Agriculture for the year ending June 30, 1891. (House Executive Document No. 55, Fifty-second Congress, first session.) Pp. 134. January, 1892.

Letter from the Secretary of Agriculture, transmitting a statement of all purchases of cocoons and all sales of silk and silk waste during the fiscal year ending June 30, 1890. Also the reports of the Ladies' Silk Culture Society of California, and the Women's Silk Culture Association of the United States. (House Executive Document No. 203, Fifty-first Congress, second session.) Pp. 25. January, 1891.

Letter from the Secretary of Agriculture, transmitting a statement showing the expenditure of the appropriation for experiments in the manufacture of sugar. (House Executive Document No. 251, Fifty-second Congress, second session.) Pp. 3. March, 1893.

Letter from the Secretary of Agriculture, in response to Senate resolution of March 24, 1892, relative to certain employés in his Department. (Senate Executive Document No. 75, Fifty-second Congress, first session.) Pp. 5. April, 1892.

#### BUREAU OF ANIMAL INDUSTRY.

Fourth and Fifth Annual Reports of the Bureau of Animal Industry, for the Years 1887 and 1888. Pp. 510, pls. 25. March, 1890.

Sixth and Seventh Annual Reports of the Bureau of Animal Industry, for the Years 1889 and 1890. Pp. 503, diagrams 3, map 1. February, 1892.

Eighth and Ninth Annual Reports of the Bureau of Animal Industry, for the Years 1891 and 1892. Pp. 428, pls. 11, figs. 7. October, 1893.

Hog Cholera: Its History, Nature, and Treatment, as determined by the Inquiries and Investigations of the Bureau of Animal Industry. Pp. 197, pls. 16. April, 1889.

Report of the United States Board of Inquiry Concerning Epizootic Diseases Among Swine. Pp. 15. August, 1889.

The Animal Parasites of Sheep. By Cooper Curtice. Pp. 222, pls. 32. July, 1890.

Report on the Beef Supply of the United States, and the Export Trade in Animals and Meat Products. By D. E. Salmon. (From Report of the Secretary of Agriculture for 1889.) Pp. 15. March, 1890.

Report on Inoculation as a Preventive of Swine Diseases. By D. E. Salmon. (From Report of the Secretary of Agriculture for 1889.) Pp. 10. March, 1890.

Proceedings of an Interstate Convention of Cattlemen, held at Fort Worth, Texas, March 11, 12, and 13, 1890. Pp. 102. May, 1890.

Special Report on Diseases of the Horse. (By Ch. B. Michener, James Law, W. H. Harbaugh, M. R. Trumbower, A. Liautard, A. A. Holcombe, R. S. Huidekoper, and William Dickson.) Pp. 560, pls. 44. February, 1891.

Special Report on Diseases of Cattle and on Cattle Feeding. (By A. J. Murray, V. T. Atkinson, W. H. Harbaugh, W. H. Lowe, James Law, William Dickson, M. R. Trumbower, Theobald Smith, and W. A. Henry.) Pp. 496, pls. 44. December, 1892.

Special Report on the History and Present Condition of the Sheep Industry of the United States. By Ezra A. Carman, H. A. Heath, and John Minto. Pp. 1000, pls. 96. December, 1892.

Special Report on the Cause and Prevention of Swine Plague. By Theobald Smith. Pp. 166, pls. 12. September, 1891.

Farmers' Bulletin No. 8. Results of Experiments with Inoculation for the Prevention of Hog Cholera. By D. E. Salmon. Pp. 40. May, 1892.

Bulletin No. 1, Bureau of Animal Industry. Investigations into the Nature, Causation, and Prevention of Texas or Southern Cattle Fever. By Theobald Smith and F. L. Kilborne. Pp. 301, pls. 10, figs. 7. March, 1893.

Bulletin No. 2, Bureau of Animal Industry. Report upon Investigations relating to the Treatment of Lumpy-Jaw, or Actinomycosis in Cattle. By D. E. Salmon. Pp. 90, pls. 8. February, 1893.

Bulletin No. 3, Bureau of Animal Industry. Special Report on Miscellaneous Investigations Concerning Infectious and Parasitic Diseases of Domesticated Animals. Pp. 88, pls. 3. November, 1893.

Maps Showing the Boundary Line of the District Infected with Splenetic or Southern Fever of Cattle. (Size, uniformly 17 by 36 inches.)

1891. March 8.

1892. March 28.

1893. March 6.

Report of the Chief of the Bureau of Animal Industry for 1889. By D. E. Salmon. (From the Report of the Secretary of Agriculture for 1889.) Pp. 49-110. August, 1890.

Report of the Chief of the Bureau of Animal Industry for 1890. By D. E. Salmon. (From the Report of the Secretary of Agriculture for 1890.) Pp. 75-132. May, 1891.

Report of the Chief of the Bureau of Animal Industry for 1891. By D. E. Salmon. (From the Report of the Secretary of Agriculture for 1891.) Pp. 83-142. June, 1892.

Report of the Chief of the Bureau of Animal Industry for 1892. By D. E. Salmon. (From the Report of the Secretary of Agriculture for 1892.) Pp. 85-122. June, 1893.

#### DIVISION OF BOTANY.

Botanical Bulletin No. 8. A Record of Some of the Work of the Division, including Extracts from Correspondence and other Communications. By George Vasey and B. T. Galloway. Pp. 67. February, 1889.

Botanical Bulletin No. 9. Peach yellows: A Preliminary Report. By Erwin F. Smith. Pp. 254, pls. 37, maps 8. March, 1889.

Botanical Bulletin No. 10. Report on the Experiments made in 1888 in the Treatment of the Downy Mildew and Black Rot of the Grape Vine. Pp. 61, pls. 2. May, 1889.

Botanical Bulletin No. 11. (Section of Vegetable Pathology.) Report on the Experiments made in 1889 in the Treatment of the Fungous Diseases of Plants. By B. T. Galloway. Pp. 119, pls. 8. May, 1890.

Botanical Bulletin No. 12. Grasses of the Southwest. Plates and Descriptions (50) of the Grasses of the Desert Region of Western Texas, New Mexico, Arizona, and Southern California. Part I. By George Vasey. Size,  $7\frac{1}{2}$  by  $11\frac{1}{2}$  inches. October, 1890.

Botanical Bulletin No. 12. Grasses of the Southwest. Plates and Descriptions (50) of the Grasses of the Desert Region of Western Texas, New Mexico, Arizona, and Southern California. Part II. By George Vasey. Size,  $7\frac{1}{2}$  by  $11\frac{1}{2}$  inches. December, 1891.

Botanical Bulletin No. 13. Grasses of the Pacific Slope, including Alaska and the Adjacent Islands. Plates and Descriptions (50) of the Grasses of California, Oregon, Washington, and the Northwestern Coast, including Alaska. Part I. By George Vasey. Size,  $7\frac{1}{2}$  by  $11\frac{1}{2}$  inches. October, 1892.

Botanical Bulletin No. 13. Grasses of the Pacific Slope, including Alaska and the Adjacent Islands. Plates and Descriptions (50) of the Grasses of California, Oregon, Washington, and the Northwestern Coast, including Alaska. Part II. By George Vasey. Size,  $7\frac{1}{2}$  by  $11\frac{1}{2}$  inches. May, 1893.

Botanical Bulletin No. 14. *Ilex Cassine*, the Aboriginal North American Tea: Its History, Distribution, and Use among the North American Indians. By E. M. Hale. Pp. 22, pl. 1. fig. 1. November, 1891.

The Agricultural Grasses and Forage Plants of the United States and such Foreign Kinds as have been Introduced. By George Vasey. With an appendix on the chemical composition of grasses, and a glossary of terms used in describing grasses. New, revised, and enlarged edition, with 114 plates. Pp. 148. January, 1890.

Contributions from the U. S. National Herbarium, [Vol. I.] No. 1. (Contents: List of Plants Collected by Dr. Edward Palmer in 1888 in Southern California; List of Plants Collected by Dr. Edward Palmer in 1889 at Lagoon Head, Cedros Island, San Benito Island, Guadalupe Island, and Head of the Gulf of California.) By George Vasey and J. N. Rose. Pp. vii, 28. June, 1890.

Contributions from the U. S. National Herbarium, [Vol. I.] No. 2. (Contents: Upon a Collection of Plants made by Mr. G. C. Neally, in the Region of the Rio Grande, in Texas, from Brazos Santiago to El Paso County.) By John M. Coulter. Pp. iii, 29-65. July, 1890.

Contributions from the U. S. National Herbarium, [Vol. I.] No. 3. (Contents: List of Plants Collected by Dr. Edward Palmer in 1890 in Lower California and Western Mexico, at La Paz, San Pedro Martin Island, Raza Island, Santa Rosalia and Santa Agueda, and Guaymas.) By George Vasey and J. N. Rose. Pp. vi, 63-90, pl. 1. November, 1890.

Contributions from the U. S. National Herbarium, Vol. I, No. 4. (Contents: List of Plants Collected by Dr. Edward Palmer in 1890 in Western Mexico and Arizona.) By J. N. Rose. Pp. vii, 91-127, pls. 2-11. July, 1891.

Contributions from the U. S. National Herbarium, Vol. I, No. 5. (Contents: List of Plants Collected by Dr. Edward Palmer in 1890 on Carmen Island, by J. N. Rose; List of Plants Collected by the U. S. S. *Albatross* in 1887-91 along the Western Coast of America, by J. N. Rose, D. C. Eaton, J. W. Eckfeldt, and A. W. Evans; Revision of the North American Species of *Hoffmanseggia*, by E. M. Fisher; Systematic and Alphabetic Index of New Species of North American Phanerogams and Pteridophytes, published in 1891, by Josephine A. Clark.) Pp. x, 129-188, pls. 12-16. September, 1892.

Contributions from the U. S. National Herbarium, Vol. I, No. 6. (Contents: List of Plants Collected by C. S. Sheldon and M. A. Carleton in the Indian Territory in 1891, by J. M. Holzinger; Observations on the Native Plants of Oklahoma Territory and Adjacent Districts, by M. A. Carleton.) Pp. ix, 189-232, pls. 17, 18. December, 1892.

Contributions from the U. S. National Herbarium, Vol. I, No. 7. Systematic and Alphabetic Index to New Species of North American Phanerogams and Pteridophytes, published in 1892, by Josephine A. Clark. Pp. iii, 233-263. iii. July, 1893.

Contributions from the U. S. National Herbarium, Vol. I, No. 8. (Contents: Notes on some Pacific Coast Grasses, by George Vasey; Descriptions of New or Noteworthy Grasses from the United States, by George Vasey; Descriptions of New Grasses from Mexico, by George Vasey; Description of New Plants from Texas and Colorado, by J. M. Holzinger; List of Plants new to Florida, by J. M. Holzinger; Descriptions of three New Plants, by J. N. Rose; Lists of Lichens from California and Mexico, collected by Dr. Edward Palmer from 1888 to 1892, by J. W. Eckfeldt.) Pp. iii, 265-292, ii, pls. 19-23. October, 1893.

Contributions from the U. S. National Herbarium, Vol. II, No. 1. Manual of the Phanerogams and Pteridophytes of Western Texas. Polypetalae. By John M. Coulter. Pp. v, 152, iv, pl. 1. June, 1891.

Contributions from the U. S. National Herbarium, Vol. II, No. 2. *Manual of the Phanerogams and Pteridophytes of Western Texas. Gamopetalæ.* By John M. Coulter. Pp. x, 153-345, pls. 2, 3. June, 1892.

Contributions from the U. S. National Herbarium, Vol. III, No. 1. *Monograph of the Grasses of the United States and British America.* By George Vasey. Pp. xiv, 89. February, 1892.

Contributions from the U. S. National Herbarium, Vol. IV. *Botany of the Death Valley Expedition. A Report on the Botany of the Expedition sent out in 1891 by the U. S. Department of Agriculture to make a Biological Survey of the Region of Death Valley, California.* By Frederick Vernon Coville. Pp. viii, 363, with frontispiece, 21 pls., and 1 map. November, 1893.

Farmers' Bulletin No. 10. *The Russian Thistle and other Troublesome Weeds in the Wheat Region of Minnesota and North and South Dakota.* By L. H. Dewey. Pp. 16. March, 1893.

Report of Grass and Forage Experiment Stations in the South and West—*Grass and Forage Experiment Station at Garden City, Kans., by Dr. J. A. Sewall, and Coöperative Branch Stations in the South, by S. M. Tracy.* (Reprinted from the Report of the Botanist in the Report of the Secretary of Agriculture for 1891.) Pp. 12. May, 1892.

Report of the Botanist for 1888. By George Vasey. (From the Report of the Commissioner of Agriculture for 1888.) Pp. 305-324, pls. 13. August, 1889.

Report of the Botanist for 1889. By George Vasey. (From the Report of the Secretary of Agriculture for 1889.) Pp. 377-396, pls. 11. August, 1890.

Report of the Botanist for 1890. By George Vasey. (From the Report of the Secretary of Agriculture for 1890.) Pp. 375-392, pls. 8. May, 1891.

Report of the Botanist for 1891. By George Vasey. (From the Report of the Secretary of Agriculture for 1891.) Pp. 341-358, pls. 8. June, 1892.

Report of the Botanist for 1892. By George Vasey. (From the Report of the Secretary of Agriculture for 1892.) Pp. 201-214. June, 1893.

#### DIVISION OF CHEMISTRY.

Chemical Bulletin No. 13, part 4. *Foods and Food Adulterants—Lard and Lard Adulterations.* By H. W. Wiley. Pp. 403-554, pls. 29-38, figs. 16-25. June, 1889.

Chemical Bulletin No. 13, part 5. *Foods and Food Adulterants—Baking Powders.* By C. A. Crampton. Pp. 557-627, fig. 26. October, 1889.

Chemical Bulletin No. 13, part 6. *Foods and Food Adulterants—Sugar, Molasses and Sirup, Confections, Honey and Beeswax.* By H. W. Wiley, with the collaboration of H. A. Huston, H. H. Nicholson, W. B. Rising, M. A. Scovell, S. P. Sharples, W. C. Stubbs, Shippen Wallace, F. G. Wiechmann, H. A. Weber, and K. P. McElroy. Pp. 633-874. April, 1892.

Chemical Bulletin No. 13, part 7. *Foods and Food Adulterants—Tea, Coffee, and Cocoa Preparations.* By Guilford L. Spencer, with the collaboration of Ervin E. Ewell. Pp. 875-1014, pls. 39-47. June, 1892.

Chemical Bulletin No. 13, part 8. *Foods and Food Adulterants—Canned Vegetables.* By K. P. McElroy, with the collaboration of W. D. Bigelow. Pp. 1015-1167. August, 1893.

Chemical Bulletin No. 20. *Record of Experiments Conducted by the Commissioner of Agriculture in the Manufacture of Sugar from Sorghum at Rio Grande, New Jersey; Kenner, Louisiana; Conway Springs, Douglas, and Sterling, Kansas.* By H. W. Wiley. Pp. 162. April, 1889.

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Circular No. 17 of the Office of Experiment Stations. Letter to Manufacturers of Spray Machinery. Pp. 2. January, 1891.

Circular No. 18 of the Office of Experiment Stations. List of Originators of Fruits and Vegetables in the United States, with Addresses and Names of Specialties. Pp. 12. March, 1891.

Circular No. 19 of the Office of Experiment Stations. Circular letter relative to coöperation in experiments with fertilizers on fruit and vegetables, to study the feeding capacities of the plants and the variations due to the action of fertilizers. Pp. 4. March, 1891.

Circular No. 20 of the Office of Experiment Stations. Organization list of the Agricultural Experiment Stations in the United States. Pp. 21. June, 1891.

Circulars of the Office of Experiment Stations—Continued.

Circular No. 21 of the Office of Experiment Stations. List of the representatives of Agricultural Colleges and Experiment Stations who were in attendance upon the fifth annual convention of the Association of American Agricultural Colleges and Experiment Stations. Printed for the use of the convention. Pp. 4. August, 1891.

Circular No. 22 of the Office of Experiment Stations. Letter relative to subject index of the literature of Agricultural Experiment Stations and kindred institutions. Pp. 4. November, 1891.

Circular No. 23 of the Office of Experiment Stations. Key to Subject Index of Literature of Agricultural Experiment Stations and Kindred Institutions. Pp. 3. December, 1893.

Circular No. 24 of the Office of Experiment Stations. Address List of the Agricultural Experiment Stations. Pp. 1. December, 1893.

Report of the Director of the Office of Experiment Stations for 1889. By W. O. Atwater. (From the Report of the Secretary of Agriculture for 1889.) Pp. 485-544, iv. August, 1890.

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#### OFFICE OF FIBER INVESTIGATIONS.

Fiber Report No. 1. A Report on Flax, Hemp, Ramie, and Jute, with Considerations upon Flax and Hemp Culture in Europe, a Report on the Ramie Machine Trials of 1889 in Paris, and Present Status of Fiber Industries in the United States. By Charles Richards Dodge. (Reprint of Report No. 1, Miscellaneous Series, of the Division of Statistics.) Pp. 104, figs. 7. June, 1892.

Fiber Report No. 2. Recent Facts regarding the Ramie Industry in America, with Brief Statements Relating to Manufacture in Europe, etc. By Charles Richards Dodge. (Reprinted from Statistical Report No. 84.) Pp. 16. May, 1891.

Fiber Report No. 3. A Report on Sisal Hemp Culture in the United States, with Statements Relating to the Industry in Yucatan and the Bahama Islands, and Brief Considerations upon the Question of Machinery for Extracting the Fiber. By Charles Richards Dodge. Pp. 59, pls. 8, figs. 21. July, 1891.

Fiber Report No. 4. A Report on Flax Culture for Fiber in the United States, including Special Reports on Flax Culture in Ireland, in Belgium, and in Austria, with Statements relative to the Industry in Russia. By Charles Richards Dodge. Pp. 93, pls. 2, figs. 12. July, 1892.

Fiber Report No. 5. A Report on the Leaf Fibers of the United States, detailing Results of Recent Investigations Relating to Florida Sisal Hemp, the False Sisal Hemp Plant of Florida, and other Fiber-producing Agaves; Bow-string Hemp, Pineapple Fiber, New Zealand Flax, and Bear-grass. By Charles Richards Dodge. Pp. 73, pls. 10, figs 12. July, 1893.

Annual Report upon Fiber Investigations for 1890. By Charles Richards Dodge. (From the Report of the Secretary of Agriculture for 1890.) Pp. 451-470. April, 1891.

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#### DIVISION OF FORESTRY.

Forestry Bulletin No. 1. Report on the Relations of Railroads to Forest Supplies and Forestry: Together with Appendices on the Structure of Some Timber Ties, their Behavior, and the Cause of their Decay in the Road-bed; on Wood Preservation; on Metal Ties; and on the Use of Spark Arresters. (By B. E. Farnow, M. G. Kern, P. H. Dudley, Henry Flad, Howard Constable, W. H. Bixby, N. H. Egleston, J. N. Lander, and G. W. Tilton.) Pp. 149, pls. 21, figs. 7. 1887.

Forestry Bulletin No. 2. Report on the Forest Conditions of the Rocky Mountains, and Other Papers; with a Map Showing the Location of Forest Areas on the Rocky Mountain Range. Second edition. (By E. J. James, Edgar T. Ensign, George B. Sudworth, Abbott Kinney, Arnold Hague, N. H. Egleston, George H. Parsons, and B. E. Farnow.) Pp. 252, 1 map, 1 diagram. May, 1889.

Forestry Bulletin No. 3. Preliminary Report on the Use of Metal Track on Railways as a Substitute for Wooden Ties, by E. E. Russell Tratman, C.E., to which is added a report of experiments in wood seasoning by the Chicago, Burlington, and Quincy Railroad Company, and other notes, compiled by B. E. Farnow. Pp. 79, diagrams 6. May, 1889.

Forestry Bulletin No. 4. Report on the Substitution of Metal for Wood in Railroad Ties. By E. E. Russell Tratman, C. E., together with a Discussion on Practicable Economies in the Use of Wood for Railway Purposes, by B. E. Farnow. Pp. 363, pls. 30. August, 1890.

Forestry Bulletin No. 5. What is Forestry? By B. E. Farnow. Pp. 52. July, 1891.

Forestry Bulletin No. 6. Timber Physics. Part 1. Preliminary Report: Need of the Investigation; Scope and Historical Development of the Science of Timber Physics; Organization and Methods of the Timber Examinations in the Division of Forestry. Compiled by B. E. Farnow. Quarto, pp. III, 57, IV, pls. 6, figs. 10. May, 1892.

Forestry Bulletin No. 7. Forest Influences. (Contents: Introduction and Summary of Conclusions, by B. E. Farnow; Review of Forest Meteorological Observations, etc., by M. W. Harrington; Relation of Forests to Water Supplies, by B. E. Farnow; Notes on the Sanitary Significance of Forests, by B. E. Farnow; Determination of the True Amount of Precipitation and its Bearing on Theories of Forest Influences, by Cleveland Abbe; Analysis of Rainfall with Relation to Surface Conditions, by George E. Curtiss). Pp. 197, figs. 63. June, 1893.

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Letter to the Secretary of Agriculture regarding Forest Growth and Timber Consumption. By B. E. Farnow. Pp. 3. April, 1893.

Circular No. 5 of the Division of Forestry. Arbor Day Planting in Eastern States. (Brief instructions on selecting and planting trees for Arbor Day purposes.) Pp. 4, size 8 by 10 inches. March, 1889.

Circular No. 6 of the Division of Forestry. Circular letter to accompany tree seeds distributed from the Department of Agriculture, and furnishing necessary instructions for growing tree seedlings. Pp. 4, letter size. February, 1890.

Circular No. 7 of the Division of Forestry. Circular of information regarding the Government timber tests undertaken by the Division of Forestry. Pp. 4. September, 1891.

Circular No. 8 of the Division of the Forestry. Strength of "Boxed" or Turpentine Timber. Pp. 3. March, 1892.

Circular No. 9 of the Division of Forestry. Effect of Turpentine Gathering on the Timber of Long-leaf Pine. Pp. 1. January, 1893.

Circular No. 10 of the Division of Forestry. Suggestions to the Lumbermen of the United States in behalf of More Rational Forest Management. Pp. 8. April, 1893.

Report of the Chief of the Division of Forestry for 1888. By B. E. Farnow. (From the Report of the Commissioner of Agriculture for 1888.) Pp. iv, 597-641, pl. 1. June, 1889.

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Report of the Chief of the Division of Forestry for 1890. By B. E. Farnow. (From the Report of the Secretary of Agriculture for 1890.) Pp. iii, 193-236. May, 1891.

Report of the Chief of the Division of Forestry for 1891. By B. E. Farnow. (From the Report of the Secretary of Agriculture for 1891.) Pp. 191-229, pls. 8. June, 1892.

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#### DIVISION OF GARDENS AND GROUNDS.

Papers on Horticultural and Kindred Subjects. By William Saunders. (Reprinted from various annual reports of the Department of Agriculture.) Pp. 124. July, 1891.

Catalogue of Economic Plants in the Collection of the United States Department of Agriculture. By William Saunders. (Reprinted from the Report of the Secretary of Agriculture for 1890.) Pp. 42. July, 1891.

Report of the Chief of the Division of Gardens and Grounds for 1889. By William Saunders. (From the Report of the Secretary of Agriculture for 1889.) Pp. 111-134. July, 1890.

Report of the Chief of the Division of Gardens and Grounds for 1890. By William Saunders. (From the Report of the Secretary of Agriculture for 1890.) Pp. 557-596. May, 1891.

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### OFFICE OF IRRIGATION INQUIRY.

Bulletin No. 1, Office of Irrigation Inquiry. Abstract of the Laws of the Several States and Territories on Irrigation and Water Rights. Compiled by O. A. Critchett. Pp. 180. September, 1893.

Senate Executive Document No. 53, Fifty-first Congress, first session:

Part 1. Progress Report on Irrigation in the United States. By Richard J. Hinton. Pp. 337, with maps, plats, and profiles. April, 1891.

Part 2. Progress Report of Artesian and Underflow Investigation between the Ninety-seventh Degree of West Longitude and the Foothills of the Rocky Mountains, with map and profiles. By Edwin S. Nettleton. Pp. 14; appendices 10. May, 1891.

Senate Executive Document No. 222, Fifty-first Congress, first session. Report on the Preliminary Investigation to Determine the Proper Location of Artesian Wells within the Area of the Ninety-seventh Meridian and East of the Foothills of the Rocky Mountains. Pp. 398, with illustrations and maps. January, 1891.

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Part 1. A Report on Irrigation and the Cultivation of the Soil thereby, with Physical Data, Conditions, and Progress within the United States for 1891. By Richard J. Hinton. Pp. 459, with maps, charts, and other illustrations. June, 1892.

Part 2. Artesian and Underflow Investigation: Final Report of the Chief Engineer, Edwin S. Nettleton, c. e., to the Secretary of Agriculture. Pp. 116, with maps, profiles, and tabulated data. June, 1892.

Part 3. Final Geological Reports of the Artesian and Underflow Investigation between the Ninety-seventh Meridian of Longitude and the Foothills of the Rocky Mountains, to the Secretary of Agriculture. By Prof. Robert Hay. Pp. 209, with maps, profiles, and illustrations. June, 1892.

Part 4. Final Report on the Mid-plains Division of the Artesian and Underflow Investigation between the Ninety-seventh Meridian of Longitude West of Greenwich and the Foothills of the Rocky Mountains, and a Special Report on Certain Artesian Conditions in the State of South Dakota. By J. W. Gregory and Fred. F. B. Coffin. Pp. 61, figs. 20, and profiles. June, 1892.

Report of the Special Agent in Charge of the Artesian and Underflow Investigations and of the Irrigation Inquiry for 1890. By Richard J. Hinton. (From the Report of the Secretary of Agriculture for 1890.) Pp. 471-488, with map. May, 1891.

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### DIVISION OF MICROSCOPY.

Food Products. Twelve Edible Mushrooms of the United States, Illustrated with Twelve Colored Types: How to Select and Prepare for the Table. By Thomas Taylor. (A reprint from the Report of the Commissioner of Agriculture for 1885.) Pp. 16, pl. 1. July, 1890.

Food Products, No. 1. Twelve Edible Mushrooms of the United States, with Directions for their Identification and their Preparation as Food. By Thomas Taylor. (A reprint of the preceding publication, with an appendix on the Preparation of Mushroom Beds.) Pp. 20, pl. 1. December, 1892.

Food Products. No. 2. Eight Edible and Twelve Poisonous Mushrooms of the United States, with Directions for the Culture and Culinary Preparation of the Edible Species. By Thomas Taylor. (A reprint of "Mushrooms of the United States," from the Report of the Secretary of Agriculture for 1890, pp. 365-374, with a brief appendix: List of the Edible Fungi of the United States.) Pp. 16, pls. 5. October, 1891.

Report of the Microscopist for 1889. By Thomas Taylor. (From the Report of the Secretary of Agriculture for 1889.) Pp. 191-209, pls. 13 (8+5). August, 1890.

Report of the Microscopist for 1890. By Thomas Taylor. (From the Report of the Secretary of Agriculture for 1890.) Pp. 361-374, pls. 11. May, 1890.

Report of the Microscopist for 1891. By Thomas Taylor. (From the Report of the Secretary of Agriculture for 1891.) Pp. 405-416, pls. 9. June, 1892.

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#### DIVISION OF ORNITHOLOGY AND MAMMALOGY.

Ornithological Bulletin No. 1. The English Sparrow in North America, especially in its Relations to Agriculture. Prepared under the direction of Dr. C. Hart Merriam, by Walter B. Barrows. Pp. 405, 1 map. July, 1889.

Ornithological Bulletin No. 2. Report on Bird Migration in the Mississippi Valley in the years 1884 and 1885, by W. W. Cooke. Pp. 313, 1 map. 1888.

Ornithological Bulletin No. 3. The Hawks and Owls of the United States, in their Relation to Agriculture. By A. K. Fisher. Pp. 210, pls. 26. February, 1893.

Ornithological Bulletin No. 4. The Prairie Ground Squirrels or Spermophiles of the Mississippi Valley. By Vernon Bailey. Pp. 69, pls. 3. October, 1893.

North American Fauna. No. 1. Revision of the North American Pocket Mice. By C. Hart Merriam. Pp. 36, pls. 4. October 25, 1889.

North American Fauna, No. 2. Description of Fourteen New Species and One New Genus of North American Mammals. By C. Hart Merriam. Pp. v, 52, pls. 8, figs. 7. October 30, 1889.

North American Fauna. No. 3. Results of a Biological Survey of the San Francisco Mountain Region and Desert of the Little Colorado, Arizona. By C. Hart Merriam and Leonhard Stejneger. Pp. vii, 136, pls. 14, maps 5. September 11, 1890.

North American Fauna, No. 4. Descriptions of twenty-six new species of North American Mammals. By C. Hart Merriam. Pp. v, 60, pls. 3, figs. 3. October 8, 1890.

North American Fauna, No. 5. Results of Biological Reconnaissance of South-central Idaho, and Descriptions of a New Genus and Two New Species of North American Mammals. By C. Hart Merriam and Leonhard Stejneger. Pp. 132, pls. 4. August 12, 1891.

North American Fauna, No. 7. The Death Valley Expedition: A Biological Survey of Parts of California, Nevada, Arizona, and Utah. Part 2. (Reports on birds, by A. K. Fisher; reptiles and batrachians, by Leonhard Stejneger; fishes, by Charles H. Gilbert; insects, by C. V. Riley; mollusks, by R. E. C. Stearns; desert trees and shrubs, by C. Hart Merriam; desert cactuses, by C. Hart Merriam, and yuccas, by C. Hart Merriam, and list of localities of the region traversed, by T. S. Palmer.) Pp. 402, pls. 14, maps 5. May 31, 1893.

Annotated List of Reptiles and Batrachians collected by Dr. C. Hart Merriam and Vernon Bailey on the San Francisco Mountain Plateau and Desert of the Little Colorado, Arizona, with Descriptions of New Species. By Leonhard Stejneger. (Reprinted from North American Fauna, No. 3.) Pp. 103-123. October, 1890.

Report on the Ornithology of the Death Valley Expedition of 1891, comprising notes on the Birds Observed in Southern California, Southern Nevada, and parts of Arizona and Utah. By A. K. Fisher. (From *North American Fauna*, No. 7.) Pp. 7-158, map 1. July, 1893.

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Report on the Fishes of the Death Valley Expedition, Collected in Southern California and Nevada in 1891, with Descriptions of New Species. By Charles H. Gilbert. (From *North American Fauna*, No. 7.) Pp. 229-234, pls. 5, 6. July, 1893.

Report on a Small Collection of Insects Made During the Death Valley Expedition; List of Diptera from Death Valley, California, and adjoining Regions; Hemiptera and Heteroptera of the Death Valley Expedition. By C. V. Riley, with supplementary reports and descriptions of new species by S. W. Williston, P. R. Uhler, and Lawrence Bruner. (From *North American Fauna*, No. 7.) Pp. 235-268. July, 1893.

Report on the Land and Fresh-water Shells Collected in California and Nevada by the Death Valley Expedition, including a few additional Species Obtained by Dr. C. Hart Merriam and Assistants in parts of the Southwestern United States. By Robert E. C. Stearns. (From *North American Fauna*, No. 7.) Pp. 269-283, figs. 2. July, 1893.

Notes on the Distribution of Trees and Shrubs in the Deserts and Desert Ranges of Southern California, Southern Nevada, Northwestern Arizona, and Southwestern Utah; Notes on the Geographic and Vertical Distribution of Cactuses, Yuccas, and Agave, in the Deserts and Desert Ranges of Southern California, Southern Nevada, Northwestern Arizona, and Southwestern Utah. By C. Hart Merriam. (From *North American Fauna*, No. 7.) Pp. 285-359, pls. 9, maps 4. July, 1893.

List of Localities in California, Nevada, and Utah, Visited by the Death Valley Expedition of 1891. By T. S. Palmer. (From *North American Fauna*, No. 7.) Pp. 361-384. July, 1893.

Circulars of the Division of Ornithology and Mammalogy:

No. 10. Circular on Killdeer Plover. (Letter of inquiry.) Pp. 1. January, 1889.

No. 11. Brief Directions for the Measurement of Small Mammals and the Preparation of Museum Skins. Pp. 4, pl. 1 March, 1889.

No. 12. Directions for Collecting the Stomachs of Birds. Pp. 3. April, 1891.

Nos. 13 and 14. (Office stationery.)

Report of the Ornithologist and Mammalogist for 1888. By C. Hart Merriam. (From the Report of the Commissioner of Agriculture for 1888.) Pp. III, 477-536, pl. 1, figs. 2. June, 1889.

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Report of the Ornithologist and Mammalogist for 1891. By C. Hart Merriam. (From the Report of the Secretary of Agriculture for 1891.) Pp. 267-271. June, 1892.

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**DIVISION OF POMOLOGY.**

Pomological Bulletin No. 1. Report on the Condition of Tropical and Semi-tropical Fruits in the United States in 1887. By P. W. Reasoner and W. G. Klee. Pp. 149, pls. 3. 1888. (Reprinted without plates June, 1891.)

Pomological Bulletin No. 2. Report on the Adaptation of Russian and Other Fruits to the Extreme Northern Portions of the United States. By T. T. Lyon. Pp. 64. 1888.

Pomological Bulletin No. 3. Classification and Generic Synopsis of the Wild Grapes of North America. By T. V. Munson. Pp. 14. October, 1890.

Pomological Bulletin No. 4. Report on the Relative Merit of Various Stocks for the Orange, with notes on Mal di Goma and the Mutual Influence of Stock and Scion. By William R. King. Pp. 21. May, 1891.

Pomological Circular No. 1. Letter of inquiry to fruit-growers. Pp. 1, letter size. December, 1887.

Pomological Circular No. 2. Directions for selecting, preparing, and sending specimens of fruits. Pp. 1, letter size. 1888.

Pomological Circular No. 3. Circular of inquiry relative to apple culture. Pp. 4, letter size. February, 1890.

Pomological Circular No. 4. Circular of inquiry relative to small-fruit culture. Pp. 23. April, 1890.

Pomological Circular No. 5. Circular of inquiry relative to nut culture. Pp. 7, letter size. June, 1890.

Pomological Circular No. 6. Circular to orange-growers, making inquiries regarding the relative merits of sour and sweet stock. Pp. 4, letter size. July, 1890.

Pomological Circular No. 7. Circular of inquiry relative to peach culture. Pp. 4; size, 8 by 13 inches. March, 1891.

Pomological Circular No. 8. Circular of inquiry relative to grape culture. Pp. 4; size, 8 by 13 inches. March, 1892.

Report of the Pomologist for 1889. By H. E. Van Deman. (From the Report of the Secretary of Agriculture for 1889.) Pp. 433-452, pls. 10. August, 1890.

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**RAINFALL INVESTIGATION.**

Report of the Special Agent of the Department of Agriculture for Making Experiments in the Production of Rainfall. By R. G. Dyrenforth. (Senate Executive Document No. 45, Fifty-second Congress, first session.) Pp. 59, pls. 9. May, 1892.

## DIVISION OF RECORDS AND EDITING.

Report of the Chief of the Division of Records and Editing for 1890. By Geo. Wm. Hill. (From the Report of the Secretary of Agriculture for 1890.) Pp. 437-447. May, 1891.

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## SILK SECTION.

(Discontinued June 30, 1891.)

Bulletin No. 1, Silk Section. How to Raise Silk-Worms: A brief Manual of Instructions, abridged from Bulletin No. 9 of the Division of Entomology. By Philip Walker. Pp. 16, figs. 10. February, 1890.

Report of the Chief of the Silk Section for 1889. By Philip Walker. (From the Report of the Secretary of Agriculture for 1889.) Pp. 453-476. August, 1890.

Report of the Chief of the Silk Section for 1890. By Philip Walker. (From the Report of the Secretary of Agriculture for 1890.) Pp. 265-276. May, 1891.

## DIVISION OF STATISTICS.

Report No. 1, Miscellaneous Series. A Report on Flax, Hemp, Ramie, and Jute, with Considerations upon Flax and Hemp Culture in Europe, a Report on the Ramie Machine Trials of 1889 in Paris, and Present Status of Fiber Industries in the United States. By Charles Richards Dodge. Pp. 104, figs. 7. April, 1890.

Report No. 2, Miscellaneous Series. Report on the Agriculture of South America, with Maps and Latest Statistics of Trade. By Almont Barnes. Pp. 189, pls. 3. May, 1892.

Report No. 3, Miscellaneous Series. Coöperative Credit Associations in Certain European Countries, and their Relation to Agricultural Interests. By Edward T. Peters. Pp. 117. May, 1892.

Report No. 4, Miscellaneous Series. Wages of Farm Labor in the United States. Results of Nine Statistical Investigations, from 1866 to 1892, with Extensive Inquiries concerning Wages from 1840 to 1865. By J. R. Dodge. Pp. 69. May, 1892.

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Report No. 6, Miscellaneous Series. Rice: Its Cultivation, Production, and Distribution in the United States and Foreign Countries. By Amory Austin. With a chapter on the Rice Soils of South Carolina, by Milton Whitney. Pp. 89. April, 1893.

Report No. 7, Miscellaneous Series. An Agricultural Survey of Wyoming. By John W. Hoyt. Pp. 72, map 1. May, 1893.

Statistical Report No. 58.\* Report on the Crops of the Year, and on Freight Rates of Transportation Companies. December, 1888. (With articles on Farm Prices, Australasian Statistics, and the Rhine Vintage.) Pp. 553-592. [January, 1889.]

\* Statistical Reports Nos. 58 to 102, inclusive, were compiled under the supervision of J. R. Dodge, Statistician of the U. S. Department of Agriculture, who also contributed many of the articles they include.

Statistical Report No. 59. Report upon the Numbers and Values of Farm Animals, and on Freight Rates of Transportation Companies. January and February, 1889. (With cotton returns for February, and an article on the Canning Industry in the United States.) Pp. 48. [February, 1889.]

Statistical Report No. 60. Report on Distribution and Consumption of Corn and Wheat, and on Freight Rates of Transportation Companies. March, 1889. (With articles on methods of determining weight per bushel, Wheat Inspection, and the Wheat Crop of the World in 1888.) Pp. 49-88.

Statistical Report No. 61. Report of the Condition of Winter Grain, the Condition of Farm Animals, and on Freight Rates of Transportation Companies. April, 1889. (With an account of the Italian Interdiction of American Pork.) Pp. 89-136.

Statistical Report No. 62. Report of the Condition of Winter Grain, and the Progress of Cotton Planting; also on the Freight Rates of Transportation Companies. May, 1889. (With an article on Foreign Trade and the American Surplus.) Pp. 137-188.

Statistical Report No. 63. Report on the Acreage of Wheat and Cotton, and Condition of Cereal Crops, and on Freight Rates of Transportation Companies. June, 1889. (With articles on Methods in Crop Reporting, and Bee-keeping.) Pp. 189-236.

Statistical Report No. 64. Report on the Area of Corn, Potatoes, and Tobacco, and Condition of Growing Crops, and on Freight Rates of Transportation Companies. July, 1889. (With articles on Agriculture in Southern Texas, and Egyptian Crops in 1888.) Pp. 237-276.

Statistical Report No. 65. Report on the Condition of Growing Crops, and on Freight Rates of Transportation Companies. August, 1889. (With an article on the Indian Wheat Crop of 1889, and the first consular reports transmitted by the Department of State under the law of 1888.) Pp. 277-332.

Statistical Report No. 66. Report on Condition of Crops in America and Europe, and on Freight Rates of Transportation Companies. September, 1889. (With an article on the Arid Lands.) Pp. 333-392.

Statistical Report No. 67. Report on Condition of Crops, Yield of Grain per Acre, and on Freight Rates of Transportation Companies. October, 1889. Pp. 393-435.

Statistical Report No. 68. Report on Yield of Crops per Acre, and on Freight Rates of Transportation Companies. November, 1889. (With articles on Publicity of Crop Results, and the Standard of Condition in Crop Reports.) Pp. 437-484.

Statistical Report No. 69. Report on the Crops of the Year, and on Freight Rates of Transportation Companies. December, 1889. (With articles on Farm Prices, Resources and Productions of South Florida, Prices of Public Lands in Mexico, the Agricultural Syndicates of France, and Crops of Sweden, 1889.) Pp. 485-548. [January, 1890.]

Statistical Report No. 70. Report upon the Numbers and Values of Farm Animals, and Freight Rates of Transportation Companies. January and February, 1890. (With cotton returns for February, and articles on Our Foreign Trade in Dairy Products Threatened, Meat Consumption in Berlin, Diseases of Animals in Germany in 1887, and Railroad Construction in 1889.) Pp. 64. [February, 1890.]

Statistical Report No. 71. Report on Distribution and Consumption of Corn and Wheat, and on Freight Rates of Transportation Companies. March, 1890. (With articles on Agricultural Depression and its Causes, and the World's Wheat Crop for 1889.) Pp. 65-116.

Statistical Report No. 72. Report of the Condition of Winter Grain, the Condition of Farm Animals, and on Freight Rates of Transportation Companies. April, 1890. (With article on Official Reports on Foreign Crops, and notes on the Cotton Crop of the Punjab for 1889.) Pp. 117-174.

Statistical Report No. 73. Report of the Condition of Winter Grain, the Progress of Cotton Planting, and Wages of Farm Labor; also on the Freight Rates of Transportation Companies. May, 1890. (With articles on Sugar Production in Europe, and Foreign Distribution of Wheat and Corn Surplus.) Pp. 175-230.

Statistical Report No. 74. Report on the Acreage of Wheat and Cotton, and Condition of Cereal Crops, and on Freight Rates of Transportation Companies. June, 1890. (With articles on Cotton Production and Trade of the World, Domestic and Foreign Wools, Course of Agricultural Prices, and Farmers' Milling Companies.) Pp. 231-310.

Statistical Report No. 75. Report on the Area of Corn, Potatoes, and Tobacco, and Condition of Growing Crops, and on Freight Rates of Transportation Companies. July, 1890. (With an article on Statistics of Mexico.) Pp. 311-374.

Statistical Report No. 76. Report on the Condition of Growing Crops, and on Freight Rates of Transportation Companies. August, 1890. (With articles on Statistics of Canada, Argentine Statistics, and Indian Wheat Crop of 1890.) Pp. 375-430.

Statistical Report No. 77. Report on Condition of Crops in America and Europe, and on Freight Rates of Transportation Companies. September, 1890. (With articles on Pan-American Trade, Tariffs of South America, and a Statistical View of Venezuela.) Pp. 431-494.

Statistical Report No. 78. Report on Condition of Crops, Yield of Grain per Acre, and on Freight Rates of Transportation Companies. October, 1890. (With articles on the Crop Year in California and Colorado, and Prices of Wheat in 1890.) Pp. 495-542.

Statistical Report No. 79. Report on Yield of Crops per Acre, and on Freight Rates of Transportation Companies. November, 1890. (With articles on a Decade of Wheat Exports, Statistics of Colombia, Small Holdings and Allotments in Great Britain, and the French Agricultural Syndicates.) Pp. 543-590.

Statistical Report No. 80. Report on the Crops of the Year and on Freight Rates of Transportation Companies. December, 1890. (With articles on Farm Prices, New York Dairymen's Association Meeting, Foreign Markets for Dairy Products, Financial Condition of California Farmers, and Peanut Production.) Pp. 591-652. [January, 1891.]

Statistical Report No. 81. Report upon the Numbers and Values of Farm Animals, and on Freight Rates of Transportation Companies. January and February, 1891. (With cotton returns for February, and articles on Sheep Husbandry in Arizona, the Canning Industry in 1890, the Angora Goat in California, and New Railroad Construction, 1890.) Pp. 56. [February, 1891.]

Statistical Report No. 82. Report on Distribution and Consumption of Corn and Wheat, and on Freight Rates of Transportation Companies. March, 1891. (With articles on Agricultural Contributions to International Commerce, Comparative Statistics of Wheat Exportation, and Legal Weights per Bushel.) Pp. 57-104.

Statistical Report No. 83. Report of the Condition of Winter Grain, the Condition of Farm Animals, and on Freight Rates of Transportation Companies. April, 1891. (With articles on the Permanency of Agricultural Production and Rural Coöperative Banks in Russia.) Pp. 105-158.

Statistical Report No. 84. Report of the Condition of Winter Grain, the Progress of Cotton Planting; also on the Freight Rates of Transportation Companies. May, 1891. (With articles on Better Times for Farmers, Recent Facts Regarding Ramie, and Agriculture in Brazil.) Pp. 159-238.

Statistical Report No. 85. Report on the Acreage of Wheat and Cotton, and Condition of Cereal Crops, and on Freight Rates of Transportation Companies. June, 1891. (With articles on Official Statistics of Foreign Crops, and Agriculture of Chili.) Pp. 239-302.



